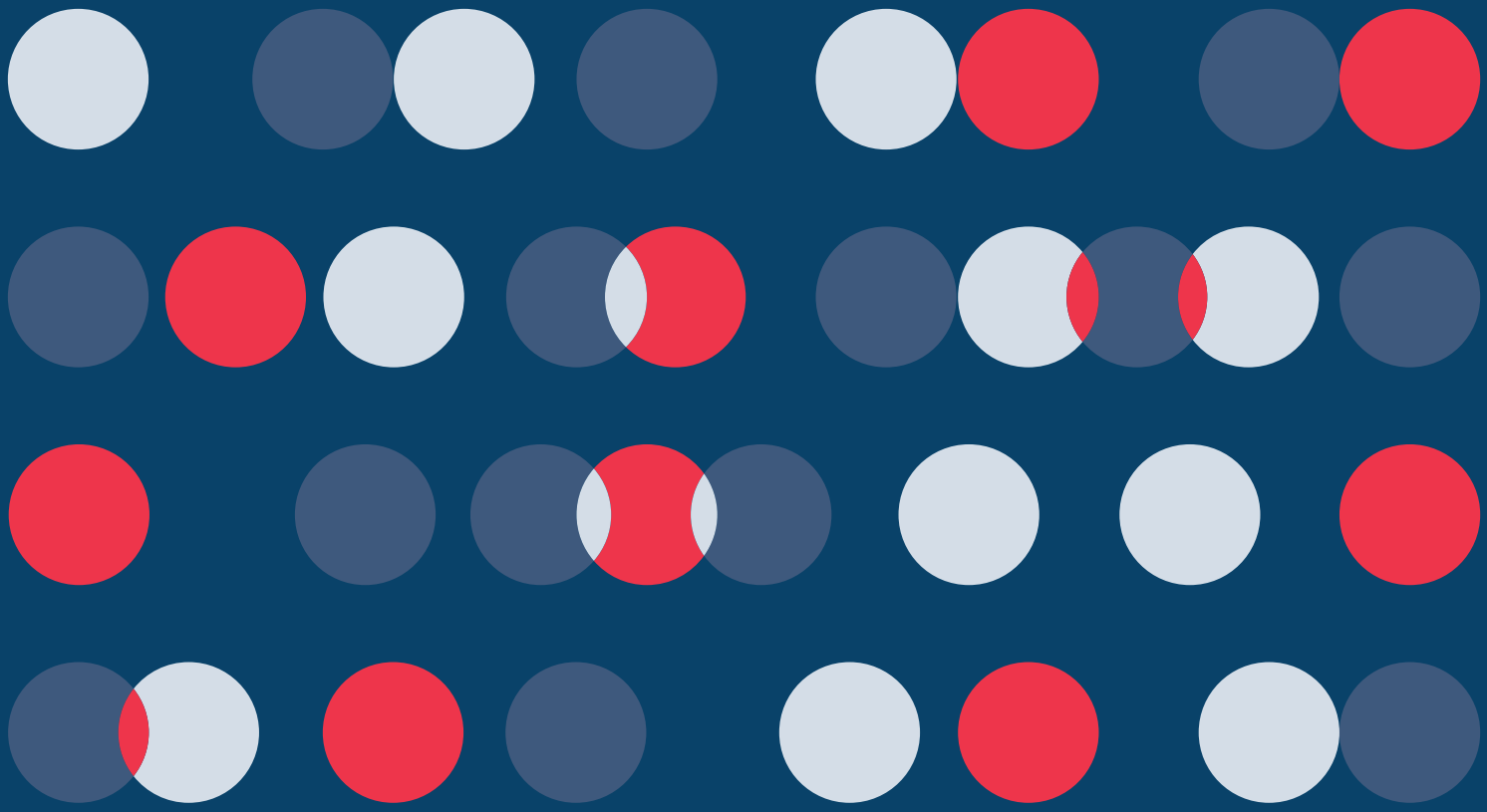
February 2016

HKEX
香港交易所

CASH MARKET TRANSACTION SURVEY 2014/15



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KEY FINDINGS

The Cash Market Transaction Survey (CMTS) has been conducted annually since 1991 to study the trading composition of Stock Exchange Participants (EPs). The main objective is to understand the relative contribution of trading value in the HKEX securities market, including the Main Board and the Growth Enterprise Market (GEM), by investor type. The market share of online trading is also assessed.

The 2014/15 survey covered EPs' transactions on both the Main Board and GEM for the 12-month period from October 2014 to September 2015 (referred to as 2014/15 study period, similarly for previous surveys). The survey included Southbound trading through the specialised EP designated for Shanghai-Hong Kong Stock Connect launched on 17 November 2014 (referred to as the "Southbound EP") in the data analysis as trading originated from investors in Mainland China.

Trading value by investor type

(1) In 2014/15, local investors' contribution to total market turnover decreased to 39% (from 45% in 2013/14), close to the level of 38% in 2012/13.

(2) Overseas investors' contribution remained steady at 39% to total market turnover (same as in 2013/14).

(3) Overseas investor trading came mainly from institutions (31% of total market turnover vs 8% from retail). Local investor trading had an equal contribution from institutions and retail investors (19% of total market turnover for each).

(4) Institutional investors (local and overseas) contributed 51% to total market turnover (58% in 2013/14), reaching a new low in the past decade. Retail investors (local and overseas) contributed 27%, up from 25% in 2013/14 for the third consecutive year.

(5) In terms of implied value of trading[1], overseas retail investor trading had the biggest year-on-year growth of 173% in 2014/15 among all trade type, albeit with a small base. Its contribution to total market turnover had grown from 3% ten years ago to about 8% in 2014/15.

(6) The contribution of EP principal trading in 2014/15 further increased to a new record high of 22% (16% in 2013/14). In terms of implied value of trading, EP principal trading achieved a year-on-year growth of 124% in 2014/15. Over the past decade, EP principal trading grew at a compound annual growth rate (CAGR) of 36% — the highest among all types of trading, compared to a CAGR of 16% for the whole market.

Overseas investor trading by origin

(7) In 2014/15, the top three major origins of overseas investor trading remained unchanged. UK investors remained as the largest contributor group, with a contribution of 27% of overseas investor trading and 10% of total market turnover (28% and 11% respectively in 2013/14). They were followed by US investors — 22.5% of overseas investor trading (down from 26% in 2013/14) and 9% of total market turnover (10% in 2013/14). Following closely behind the US investors, the contribution from Mainland investors increased significantly in 2014/15 after the

[1] *See Glossary for definition.*

launch of Shanghai-Hong Kong Stock Connect — 21.9% of overseas investor trading (up from 13% in 2013/14) and 9% of total market turnover (5% in 2013/14).

(8) The contribution from Continental European investors further decreased in 2014/15 to 8% of overseas investor trading (10% in 2013/14) and 3% of total market turnover (4% in 2013/14).

(9) Asian investors in aggregate contributed 36% of total overseas investor trading in 2014/15 (up from 29% in 2013/14), thanks to the growth in trading from Mainland investors. Following Mainland investors, Singaporean investors were the second largest contributor group in Asia — 8% of overseas investor trading (down from 10% in 2013/14) and 3% of total market turnover (4% in 2013/14).

(10) Trading from UK, US, Continental Europe came predominantly from institutional investors (at least 85% or more). The majority of trading from the following origins also came from institutional investors — Singapore (at least 77%), Australia (at least 71%) and Japan (at least 54%). On the contrary, a significant proportion of trading from Mainland China (at least 56%) came from retail investors.

(11) In 2014/15, the total overseas investor trading value increased year-on-year by 71%, with positive growth recorded for every individual specified overseas origin. Trading from Mainland investors recorded the largest growth of 185%. The year-on-year growth rate for the US was 50%, UK was 64% and Continental Europe was 25%, all below the overall growth rate in total overseas investor trading.

(12) Over the past decade, total overseas investors trading recorded a CAGR of 16%. Overseas investor trading from Asia grew at a CAGR of 23%, higher than that from the US (14%) and Europe (12%). Investor trading from Mainland China recorded a CAGR of 35% in the past decade, the highest among all individual specified overseas origins.

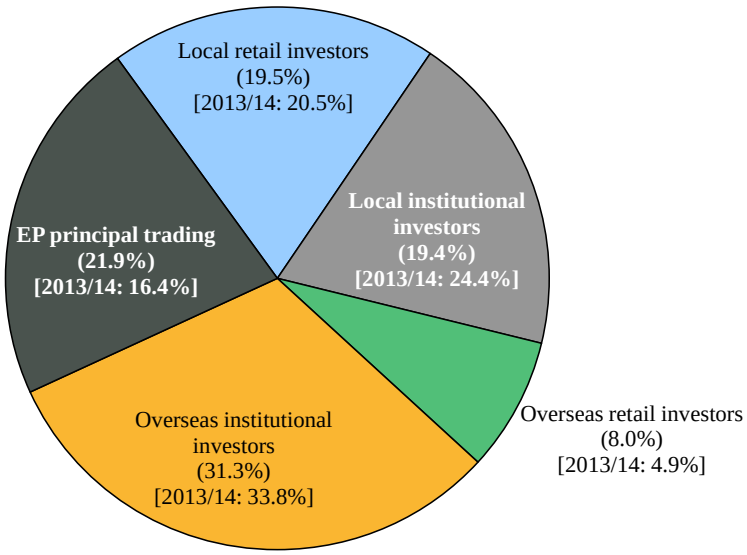
Retail online trading

(13) In 2014/15, retail online trading accounted for 44% of total retail investor trading (up from 38% in 2013/14) and 12% of total market turnover (up from 9% in 2013/14).

FIGURES AND TABLES

1. Distribution of market trading value by investor type

Figure 1. Distribution of cash market trading value by investor type (Oct 2014 – Sep 2014)

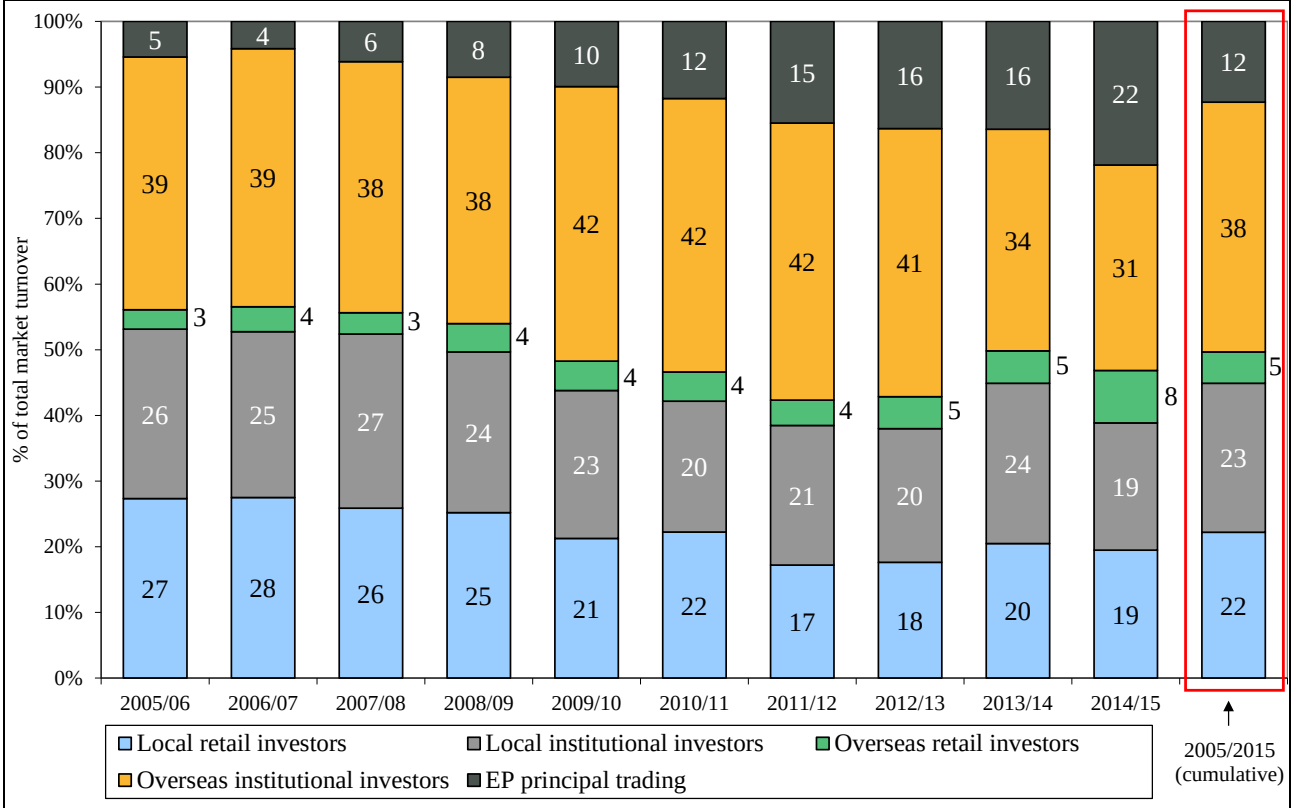


Note: Numbers may not add up to 100% due to rounding.

Table 1. Breakdown of contribution by type of trade in cash market (2012/13 – 2014/15)

Type of trade	2012/13	2013/14	2014/15
All trading			
Investor trading	83.67	83.57	**78.13**
EP principal trading	16.33	16.43	**21.87**
	100.00	100.00	**100.00**
Investor trading			
Retail	26.85	30.40	**35.16**
Institutional	73.15	69.60	**64.84**
	100.00	100.00	**100.00**
Investor trading			
Local	45.40	53.73	**49.72**
Overseas	54.60	46.27	**50.28**
	100.00	100.00	**100.00**
Retail investor trading			
Local	78.42	80.66	**70.96**
Overseas	21.58	19.34	**29.04**
	100.00	100.00	**100.00**
Institutional investor trading			
Local	33.28	41.96	**38.21**
Overseas	66.72	58.04	**61.79**
	100.00	100.00	**100.00**
Local investor trading			
Retail	46.38	45.64	**50.18**
Institutional	53.62	54.36	**49.82**
	100.00	100.00	**100.00**
Overseas investor trading			
Retail	10.61	12.70	**20.31**
Institutional	89.39	87.30	**79.69**
	100.00	100.00	**100.00**

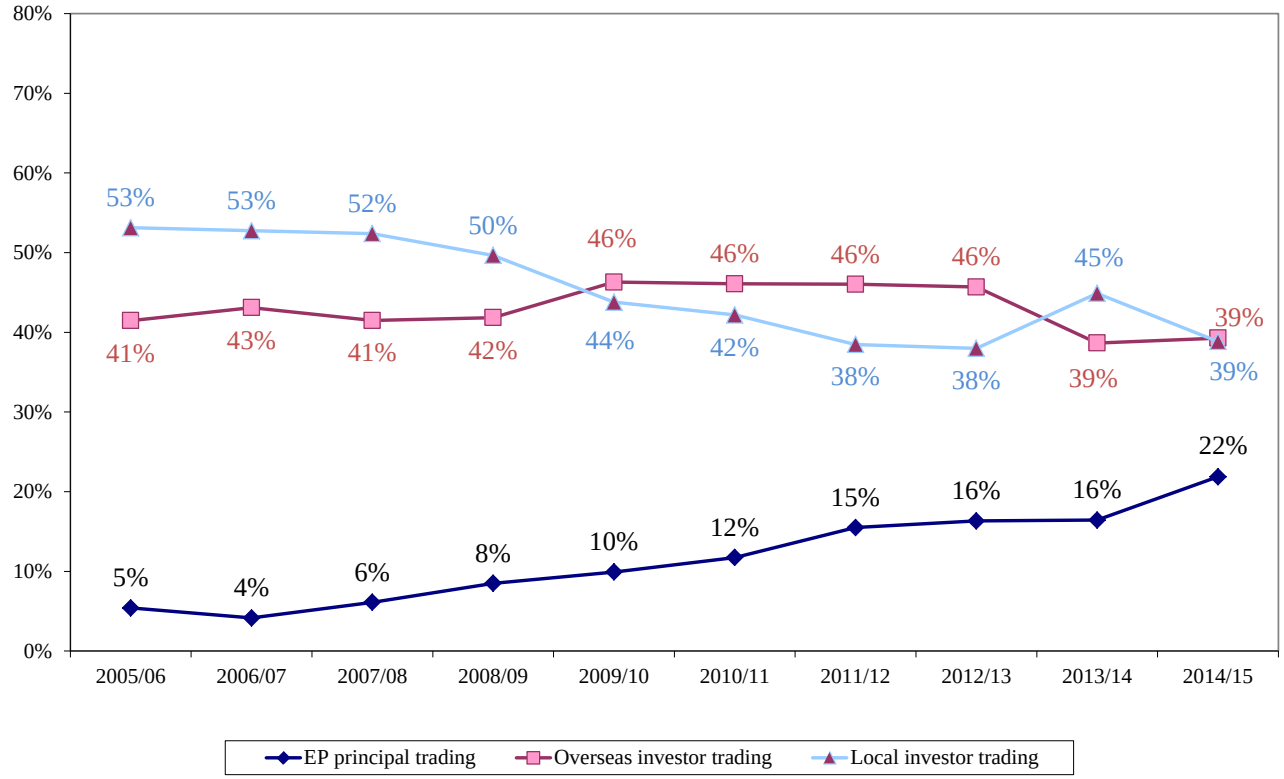
Figure 2. 10-year trend in the distribution of cash market trading value by investor type (2005/06 – 2014/15)



Type of trade	Distribution of cash market trading by type of trade (%)										2005/2015 cumulative market turnover (%)
	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	
EP principal trading	5.41	4.15	6.12	8.49	9.92	11.73	15.49	16.33	16.43	21.87	12.30
Overseas investor trading	41.47	43.10	41.49	41.84	46.30	46.09	46.03	45.69	38.67	39.28	42.79
Retail	2.96	3.81	3.24	4.32	4.50	4.43	3.87	4.85	4.91	7.98	4.75
Institutional	38.51	39.30	38.25	37.52	41.80	41.66	42.16	40.84	33.75	31.30	38.04
Local investor trading	53.12	52.75	52.39	49.66	43.78	42.18	38.48	37.99	44.90	38.85	44.91
Retail	27.34	27.50	25.88	25.20	21.27	22.25	17.20	17.62	20.49	19.49	22.19
Institutional	25.78	25.24	26.51	24.46	22.51	19.93	21.28	20.37	24.41	19.36	22.72

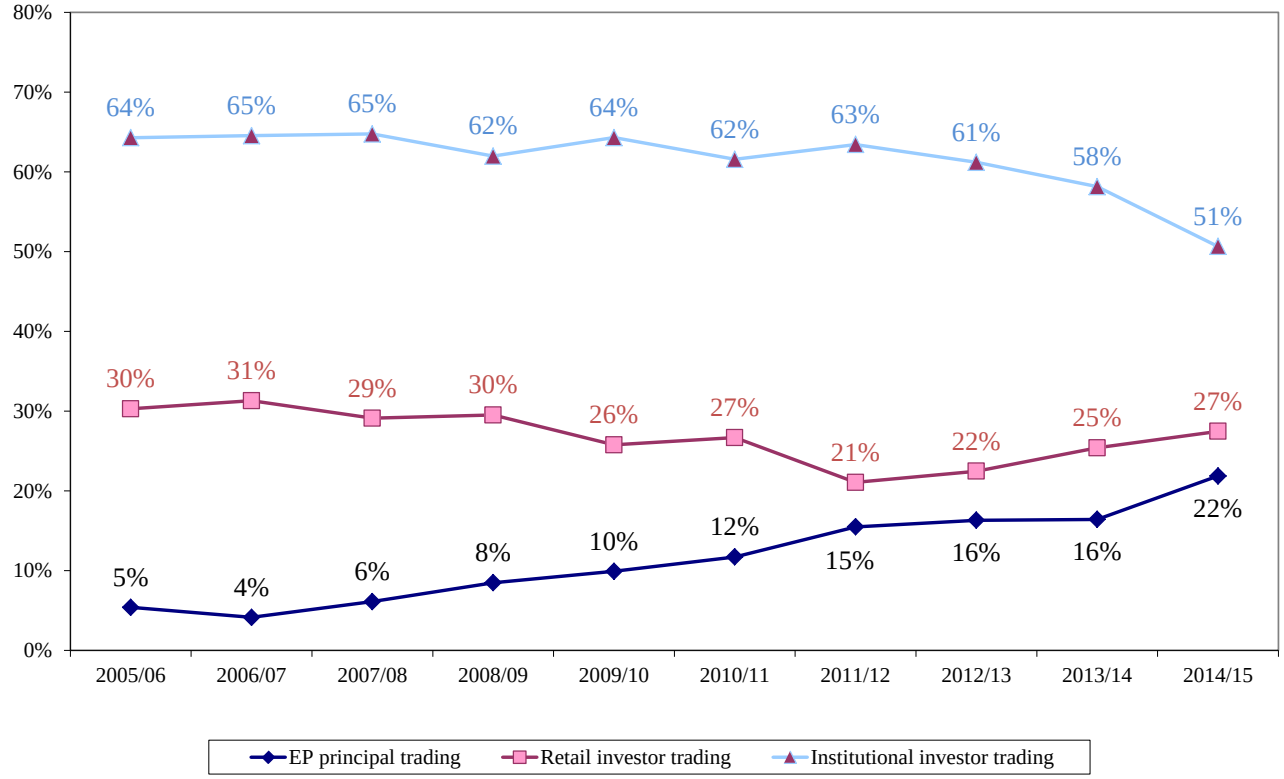
Note: Numbers may not add up to sub-totals or 100% due to rounding.

Figure 3. Distribution of cash market trading value by investor type (local vs overseas) (2005/06 – 2014/15)



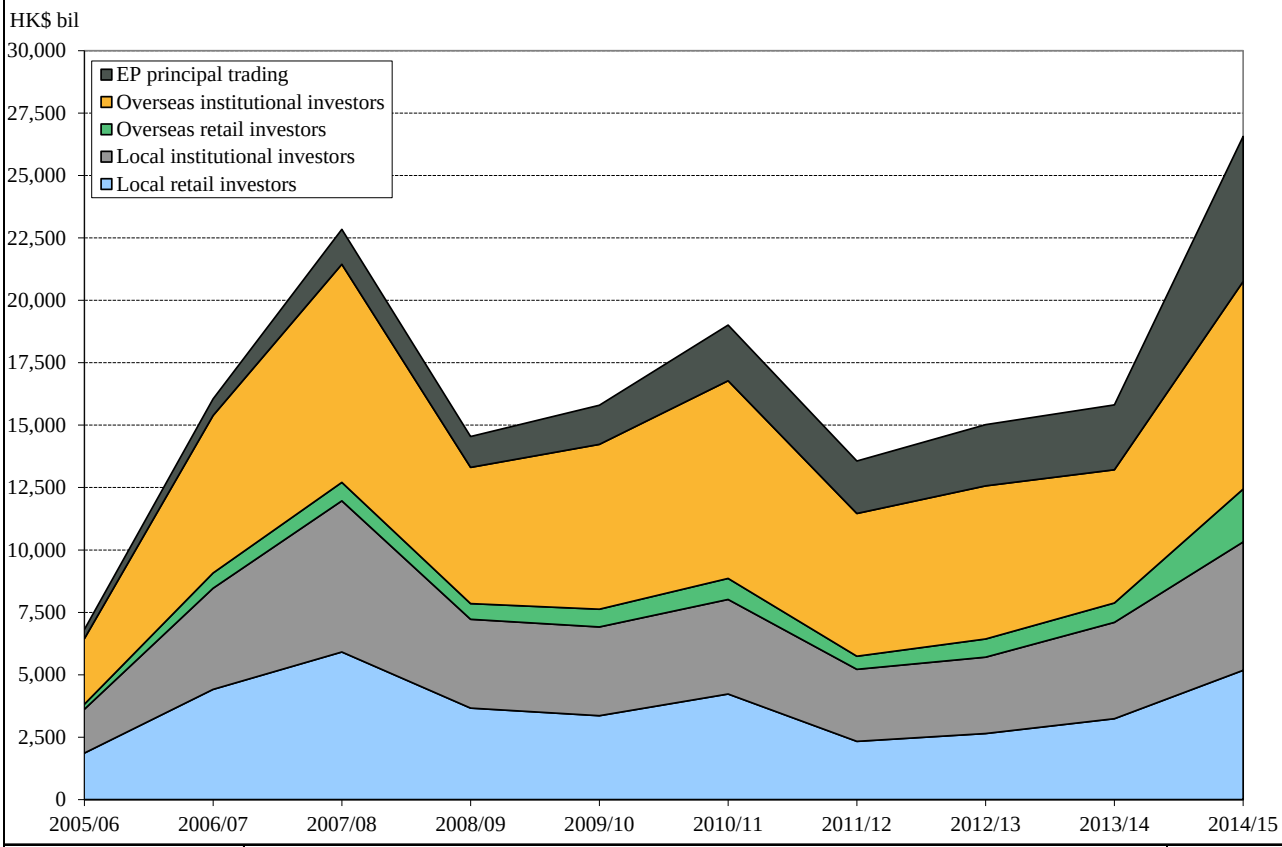
Note: Numbers may not add up to 100% due to rounding.

Figure 4. Distribution of cash market trading value by investor type (retail vs institutional) (2005/06 – 2014/15)



Note: Numbers may not add up to 100% due to rounding.

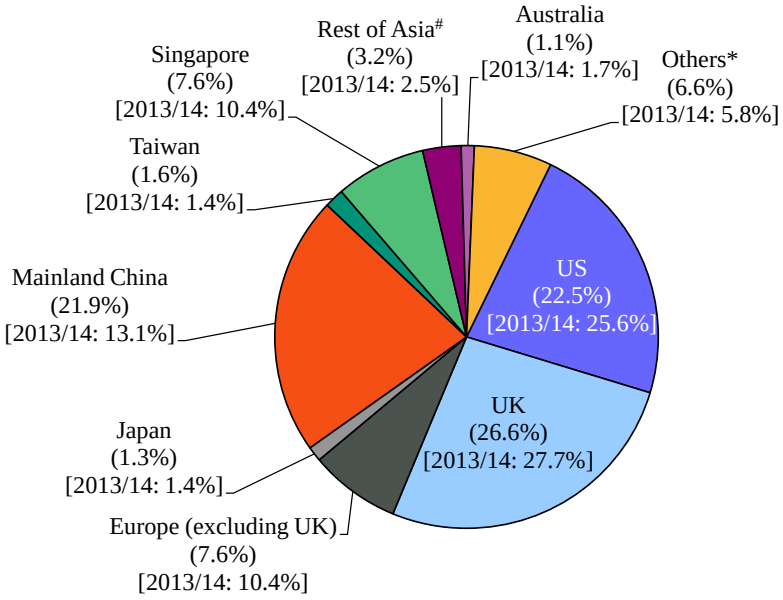
Figure 5. Implied value of cash market trading by investor type (2005/06 – 2014/15)



	Year-on-year % change										2005/2015
Type of trade	**2005/06**	**2006/07**	**2007/08**	**2008/09**	**2009/10**	**2010/11**	**2011/12**	**2012/13**	**2013/14**	**2014/15**	**CAGR**
EP principal trading	8.23	80.90	110.00	-11.68	26.87	42.32	-5.78	16.69	5.97	123.59	35.87
Overseas investor trading	73.87	144.94	36.98	-35.79	20.19	19.79	-28.74	9.92	-10.91	70.69	15.63
Retail	91.51	202.90	21.08	-15.04	13.06	18.57	-37.74	38.86	6.63	172.84	29.87
Institutional	72.65	140.48	38.52	-37.54	21.01	19.92	-27.78	7.26	-12.99	55.83	13.68
Local investor trading	42.96	134.03	41.35	-39.65	-4.25	15.92	-34.91	9.33	24.43	45.38	12.35
Retail	39.06	137.13	33.93	-38.02	-8.30	25.85	-44.85	13.45	22.44	59.83	12.04
Institutional	47.35	130.74	49.44	-41.24	-0.07	6.54	-23.81	6.01	26.15	33.24	12.68
Retail investor trading	42.88	143.56	32.36	-35.46	-5.17	24.58	-43.67	18.12	19.03	81.68	15.07
Institutional investor trading	61.53	136.57	42.79	-39.06	12.69	15.23	-26.50	6.84	0.03	46.35	13.29
Total	**51.50**	**135.68**	**42.31**	**-36.33**	**8.62**	**20.33**	**-28.65**	**10.74**	**5.27**	**68.02**	**16.33**

2. Distribution of overseas investor trading value by origin

Figure 6. Distribution of overseas investor trading value in cash market by origin (Oct 2014 – Sep 2015)

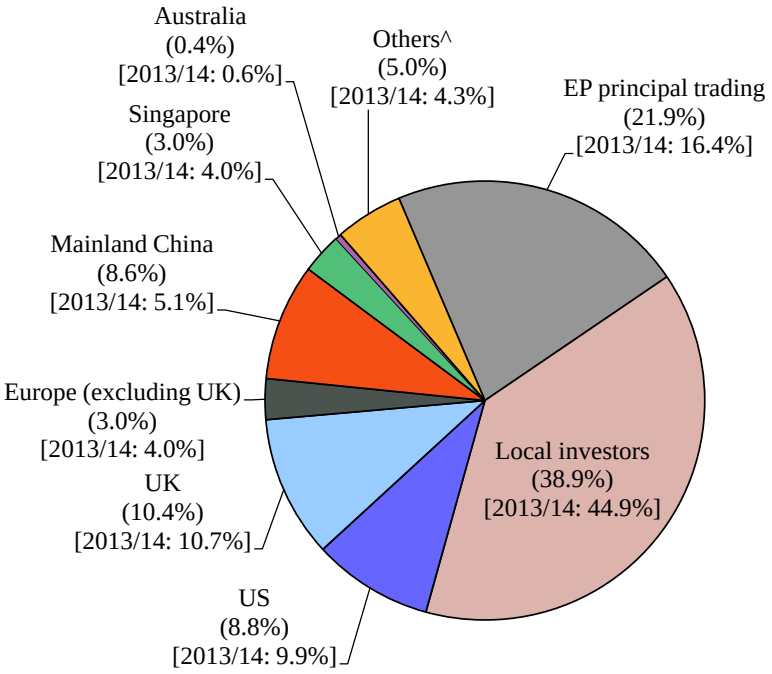


Note: Numbers may not add up to 100% due to rounding.

\# In 2014/15, reported origins in "Rest of Asia" were Bangladesh, Brunei, Cambodia, India, Indonesia, Kazakhstan, Kyrgyzstan, Laos, Macau, Malaysia, Mongolia, Nepal, Pakistan, Philippines, South Korea, Sri Lanka, Thailand and Vietnam.

* In 2014/15, reported origins in "Others" included Anguilla, Bahamas, Bahrain, Belize, Bermuda, Bolivia, Brazil, British Virgin Islands, Burkina Faso, Cameroon, Canada, Cayman Islands, Cook Islands, Costa Rica, Dominica, Ecuador, Grenada, Guyana, Honduras, Israel, Jamaica, Kenya, Kuwait, Lebanon, Liberia, Marshall Islands, Mauritius, Mexico, Morocco, New Zealand, Niue, Oman, Panama, Paraguay, Peru, Qatar, Russia, Samoa, Saudi Arabia, Seychelles, South Africa, St. Kitts & Nevis, Suriname, Trinidad & Tobago, Turkey, Turks & Caicos Islands, United Arab Emirates, Uruguay, Vanuatu and Venezuela.

Figure 7. Distribution of cash market trading value by local and overseas origin (Oct 2014 – Sep 2015)



^ Others comprise investors from Japan, Taiwan, Rest of Asia and Rest of the World.
Note: Numbers may not add up to 100% due to rounding.

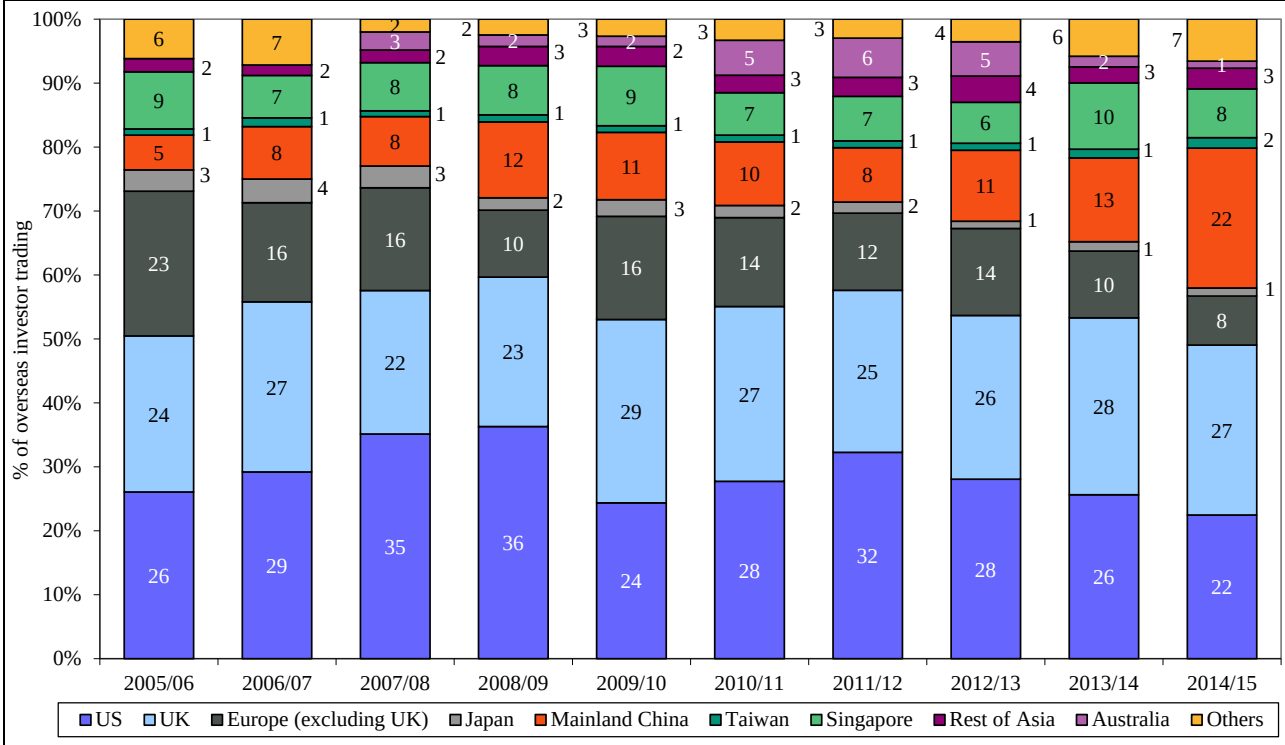
Table 2. Minimum proportion of retail/institutional investor trading from each overseas origin (2014/15)		
	Minimum proportion of the trading coming from	
Origin	**Retail investors**	**Institutional investors**
US	0.3%	89.8%
UK	0.1%	91.7%
Europe (excl. UK)	0.2%	85.5%
Japan	0.2%	53.6%
Mainland China	55.8%	21.1%
Taiwan	7.5%	27.1%
Singapore	0.8%	76.8%
Australia	1.6%	71.4%

Notes:

(1) The minimum proportions were deduced figures from the responses. The difference between 100% and the summation of the two figures for an origin represents the proportion of trading from that origin which could come from either retail or institutional investors.

(2) The Southbound EP was excluded from the analysis.

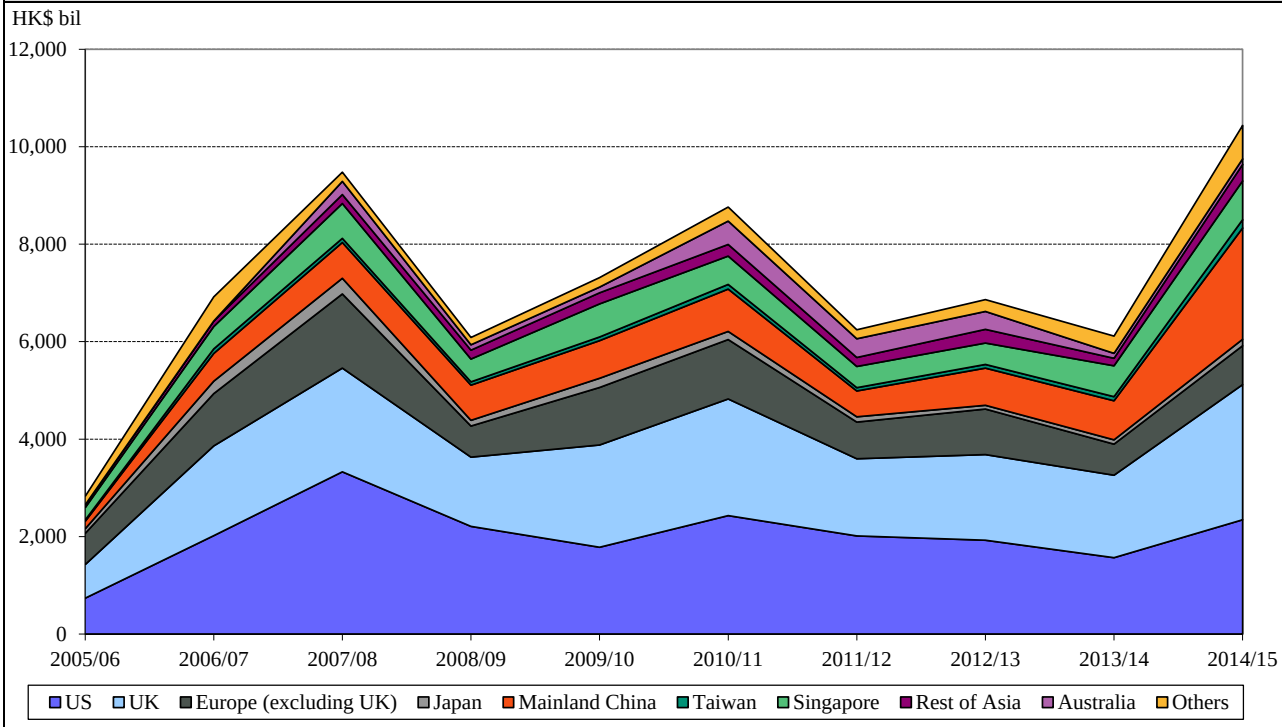
Figure 8. 10-year trend in the distribution of overseas investor trading in cash market by origin (2005/06 – 2014/15)



Overseas origin	Distribution of overseas investor trading by origin (%)									
	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
US	26.08	29.19	35.13	36.31	24.37	27.75	32.27	28.07	25.65	22.48
Europe	47.03	42.12	38.51	33.84	44.81	41.23	37.41	39.22	38.10	34.22
UK	24.40	26.61	22.46	23.35	28.68	27.32	25.35	25.60	27.68	26.57
Europe (excluding UK)	22.64	15.51	16.05	10.49	16.13	13.91	12.05	13.62	10.42	7.64
Asia	20.73	21.52	21.52	25.58	26.56	22.27	21.23	23.82	28.81	35.64
Japan	3.33	3.69	3.39	1.92	2.58	1.90	1.74	1.12	1.45	1.27
Mainland China	5.44	8.22	7.75	11.86	10.55	9.92	8.49	11.12	13.11	21.89
Taiwan	0.96	1.36	0.89	1.11	1.03	1.09	1.08	1.10	1.37	1.63
Singapore	8.95	6.63	7.55	7.69	9.28	6.63	6.97	6.40	10.37	7.61
Rest of Asia	2.06	1.63	1.94	3.00	3.11	2.73	2.95	4.09	2.51	3.24
Australia			2.85	1.81	1.60	5.47	6.15	5.35	1.65	1.09
Others	6.15	7.17	1.99	2.46	2.66	3.28	2.95	3.54	5.79	6.57
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Notes:
(1) Australia was included in "Others" in surveys prior to 2007/08.
(2) Numbers may not add up to sub-totals or 100% due to rounding.

Figure 9. Implied value of overseas investor trading in cash market by origin (2005/06 – 2014/15)



Overseas origin	Year-on-year % change										2005/2015 CAGR
	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	
US	57.74	174.18	64.82	-33.62	-19.36	36.41	-17.13	-4.38	-18.59	49.60	13.73
Europe	72.84	119.34	25.24	-43.58	59.19	10.20	-35.34	15.24	-13.45	53.30	11.61
UK	70.94	167.18	15.59	-33.25	47.65	14.08	-33.86	11.00	-3.69	63.89	16.73
Europe (excluding UK)	74.94	67.79	41.80	-58.04	84.86	3.29	-38.25	24.16	-31.80	25.17	2.49
Asia	105.56	154.28	36.96	-23.67	24.78	0.47	-32.09	23.35	7.74	111.18	22.80
Japan	125.46	171.62	25.94	-63.67	61.76	-11.63	-35.04	-29.22	15.48	49.06	3.86
Mainland China	74.77	270.15	29.16	-1.67	6.89	12.57	-38.97	43.89	5.03	185.03	34.98
Taiwan	80.19	246.84	-9.74	-20.58	12.29	26.57	-29.57	11.90	11.24	103.23	22.68
Singapore	99.33	81.53	55.86	-34.52	44.96	-14.36	-25.13	0.85	44.42	25.36	13.57
Rest of Asia	330.99	93.48	63.27	-0.93	24.78	5.08	-22.94	52.54	-45.27	120.17	21.60
Australia				-59.26	6.39	309.19	-19.83	-4.36	-72.47	12.79	-11.59
Others	67.10	185.15	-61.96	-20.48	29.91	47.67	-36.05	31.90	45.86	93.71	16.47
Total	**73.87**	**144.94**	**36.98**	**-35.79**	**20.19**	**19.79**	**-28.74**	**9.92**	**-10.91**	**70.69**	**15.63**

Notes:

(1) Australia was included in "Others" in surveys prior to 2007/08, for which year-on-year percentage change in implied value of investor trading was not available. The CAGR of trading from Australian investors was calculated for the period starting from 2007/08 when data for this origin was available. Since "Australia" was spun off from "Others" during the ten-year period, CAGR for "Others" had to be interpreted with care.

(2) The substantial growth in trading from Australia in 2010/11 was due to a change in reporting by an EP, who reported a substantial contribution to its trading from its sister company in Australia in 2010/11 while in past surveys, this kind of trading carried out for its corporate group was reported as its principal trading.

3. Retail online trading

Figure 10. Percentage share of retail online trading value in cash market (2005/06 – 2014/15)

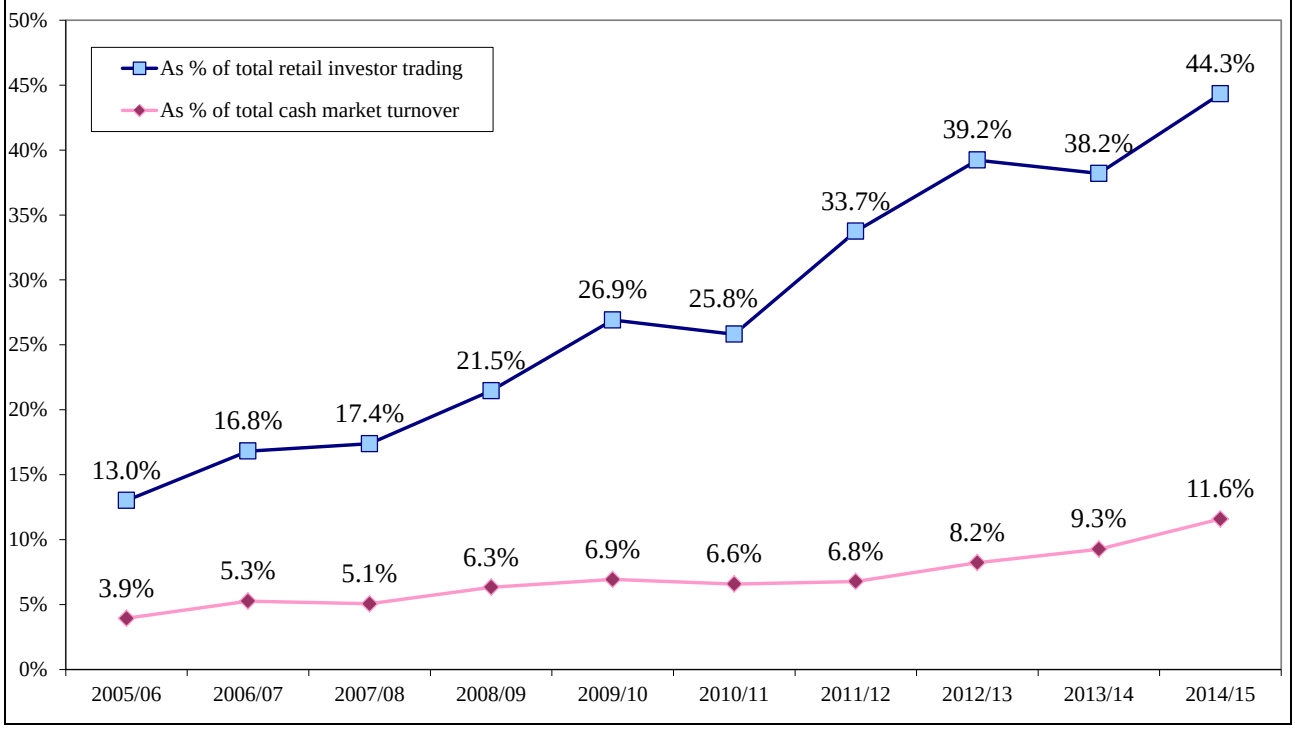


Table 3. Statistics on retail online trading in cash market (2010/11 – 2014/15)

	2010/11	2011/12	2012/13	2013/14	2014/15
Responded sample size	431	453	457	433	414
Online brokers					
Number of online brokers	209	245	250	247	240
- As % of all responding EPs	48%	54%	55%	57%	58%
Online trading					
Total implied trading value (HK$m)	1,252,109	919,187	1,235,360	1,465,223	3,079,997
- As % of total market turnover	6.59%	6.78%	8.22%	9.27%	11.59%
- As % of all agency (investor) trading	7.50%	8.11%	9.95%	11.20%	15.09%
- As % of total retail investor trading	25.82%	33.75%	39.22%	38.20%	44.32%
- As % of total turnover of online brokers	18.35%	22.39%	27.56%	28.94%	33.02%

Notes:

(1) One EP which had a significant proportion of its total turnover as retail agency trading and reported high percentage share of retail online trading prior to 2010/11 did not provide the percentage share of its retail online trading since 2010/11. This EP was excluded from the responded sample in calculating retail online trading in percentage and value terms since then.

(2) The Southbound EP was regarded as a non-online broker.

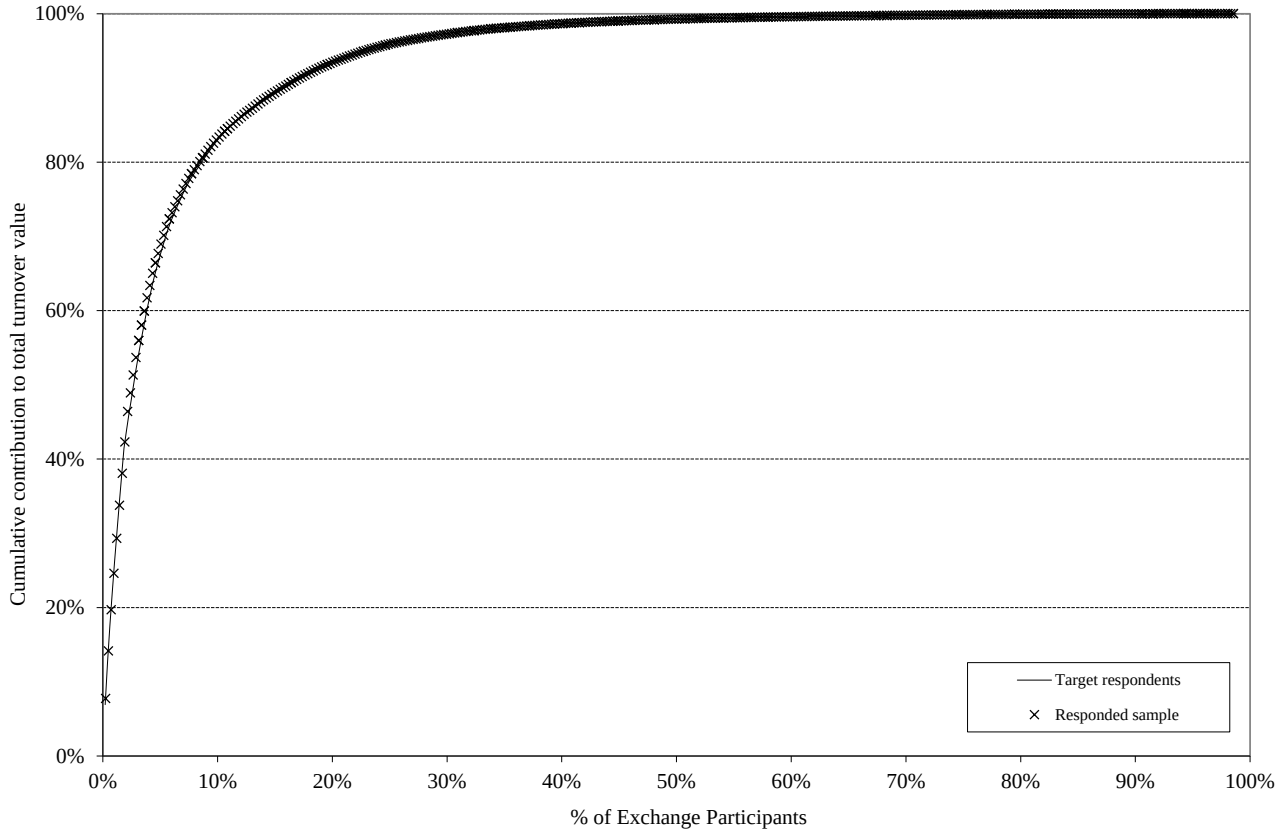
GLOSSARY

Agency trading	Trading on behalf of the participant firm's clients, including client trading channelled from the firm's parent or sister companies.
Implied value of trading	The implied value of trading for a particular type of trade is calculated by multiplying the percentage contribution to market turnover by that type of trade as obtained from the survey by the actual overall market turnover during the study period. The implied value of trading from a particular overseas origin is calculated by first calculating the implied overseas agency trading value during the study period, and then multiplying it by the percentage contribution to overseas agency trading by that origin as obtained from the survey.
Individual/retail investors	Investors who trade on their personal account.
Institutional investors	Investors who are not individual/retail investors.
Local investors	Individual/retail investors residing in Hong Kong or institutional investors operating in Hong Kong, with Hong Kong as the source of funds.
Online brokers	Stock Exchange Participants who offer online trading service to individual/retail investors.
Overseas investors	Individual/retail investors residing outside Hong Kong or institutional investors operating outside Hong Kong, with the source of funds overseas.
Principal trading	Trading on the participant firm's own account.
Retail online trading	Trading originating from orders entered directly by individual/retail investors and channelled to the brokers via electronic media (e.g. the Internet).

APPENDIX 1. RESPONSE RATE AND REPRESENTATIVENESS OF THE RESPONDED SAMPLE

In October 2015, survey questionnaires were mailed to 487 EPs in the target population (excluding the Southbound EP). Out of the 487 questionnaires sent, 414 completed questionnaires were received, representing an overall response rate of 85% by number. Including the Southbound EP, the overall study sample represented 85% by number and 90% by turnover value in the target population.

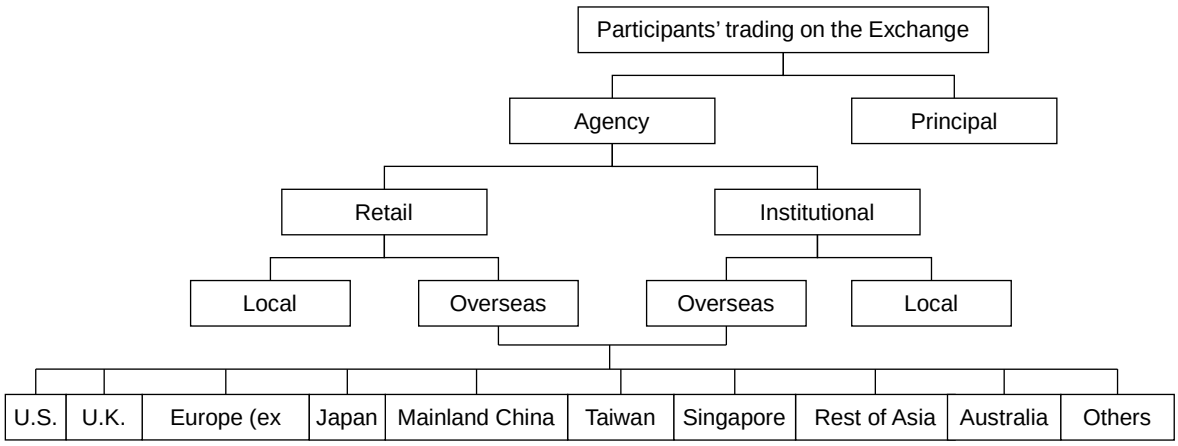
Representativeness of the responded sample vis-à-vis the target population of Exchange Participants*



* Excluding the Southbound EP.

APPENDIX 2. SURVEY DESIGN AND METHODOLOGY

(1) Classification of Stock Exchange Participants' trading



(2) Target population

The target population included all trading Stock Exchange Participants (EPs) of the cash market who became trading participants prior to the end of March 2015 (i.e. who had been in business for over 6 full months during the study period) and remained so before the fieldwork of the survey began. It excluded EPs whose trading was suspended from July 2015 to September 2015 or ceased on or before September 2015 or who traded for less than 6 months during the study period. This is to avoid distortion of the results by participants who were not in the normal course of business.

The specialised EP designated for Stock Connect Southbound trading (referred to as the "Southbound EP") — China Investment Information Services Ltd — was excluded from the mailed sample. All of the trading recorded for this EP was included in the subsequent data analysis as trading from Mainland China investors.

(3) Methodology

The study period is from October 2014 to September 2015.

EPs in the target population (excluding Southbound EP) were ranked in descending order by turnover value. To achieve a fairer ranking, the actual turnover of new EPs whose trading period was less than 12 months during the study period was annualised for the ranking. The actual turnover of the EPs was used in analysing the results. Ranking of EPs by turnover was for the purpose of monitoring the responses and follow-up in the fieldwork as well as generating response rates by turnover size groups as weighting factors in the subsequent analysis.

The survey sample consisted of all EPs in the target population. Survey questionnaires

were mailed to each EP firm in the sample, with close telephone follow-up to ensure a high response rate, especially for the EPs which were top-ranked in the target population by turnover value. In the survey questionnaire, EPs were requested to provide an estimated percentage breakdown of their trading value during the study period in accordance with the prescribed classification. EPs were asked to provide their consolidated trading composition including trading channelled through their affiliate or sister companies as far as possible, if applicable. Those who were known to have such situation but who refused to provide details were treated as cases with missing value for which a mean substitution method[2] was adopted, except for online trading. For online trading, EPs who reported to be online brokers but were unable to provide the proportion of their retail investor trading as online trading were excluded from the responded sample in calculating the retail online trading in percentage and value terms.

Each responding EP's answers in percentage terms were weighted by the respondent's total turnover value in the overall market accordingly to obtain respective values in the responded sample. The implied percentage shares of different types of trade in the market were then calculated, adjusted by the response rate in value terms relative to the target population.

For the Southbound EP, all trading was regarded as overseas investor trading with Mainland China origin. As the breakdown of the Southbound trading by retail/institutional investors was not available, the overall share of retail/institutional investor trading based on weighted responses from the survey sample was applied to the Southbound EP for completing the analysis for the market. For the analysis of retail online trading, the Southbound EP was regarded as a non-online broker.

The implied value of trading for a particular type of trade is determined by multiplying the percentage contribution to total turnover (of target population) by that type of trade as obtained from the survey by the actual total turnover in the overall market during the study period for that year of survey.

(4) Limitations

In providing the breakdown of total turnover value by the type of trade, many EPs could only provide their best estimates instead of hard data.

EPs might not know the true origins of all their client orders. For instance, an EP might classify transactions for a local institution as such when in fact the orders originated from overseas and were placed through that local institution, or vice versa.

In practice, it is not unusual for EPs to convey client orders to other EPs for execution. When providing the breakdown of their investor composition, most of the EPs would treat those EPs who conveyed orders to them as their ultimate clients, i.e. as local institutions,

[2] The average values obtained from other EPs in the same size group were applied to the missing cases. For this purpose, EPs in the target population (excluding Southbound EP) were divided into three size groups with equal aggregate contributions to total turnover value of the target population — large-sized brokers (contributing the top one-third of turnover in the target population), medium-sized brokers (contributing the second one-third of turnover) and small-sized brokers (contributing the bottom one-third of turnover).

regardless of the client origin.

Some bank-related EPs might not be able to provide the trading composition of client orders originating from their associated banks and would treat the banks as their local institutional clients. This would also affect the result of retail online trading since part of the retail investor trading channelled through banks would be online.

Different EPs would have different corporate group structures and operating models within their corporate groups. Some EPs might be able to provide the investor composition of trading channelled via their sister companies; others may regard their sister companies as their clients and incorporated no further breakdown. In other words, the depth of detail in investor composition across EPs might not be on the same ground.

The non-responded EPs and responded EPs with missing responses for certain questions may have different trading composition from the other responded EPs. The exclusion of non-responded EPs from the applicable analysis or the mean substitution method for missing answers might generate survey results deviating from the true situation. Since the survey has a high response rate by turnover value and a method of weighting by size group in treating missing responses was adopted to cater for the different trading composition by size group, the impact of non-responses to the overall findings would be limited. Nevertheless, there might be some impact on the types of investor trading which had relatively low contribution to market turnover.

In the analysis, Stock Connect Southbound trading assumed the same ratio of retail/institutional investor trading as that based on the overall weighted responses. However, Southbound trading from Mainland investors may have a different retail/institutional trading ratio due to the peculiar conditions of outward investment channels in Mainland China. Due to data unavailability of the investor composition of Southbound trading, the current treatment is considered the best-effort estimate. Nevertheless, the impact of this on the overall results would be small as Southbound trading constituted only 1.3% of total turnover of the target population in the survey period.

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